

Robert V. Boyle, Regional Chief of Operations

November 19, 1947

Harold B. Elmendorf, Chief, Reg. Water Cons. Div.

Control of Phreatophytes

In accordance with a request from O. C. Williams, State Land Commissioner of Arizona, Al Kimmison, and I called on him at Phoenix on the morning of October 28. He wanted to discuss the problem of salt cedars and other phreatophytes in Arizona. This was a strange coincidence since I had just written a memo to you on this subject a few days earlier. Besides the estimated 60,000 acre-feet or more consumed at the head of San Carlos reservoir, Sam Turner estimates that these growths consume between 200,000 and 350,000 acre-feet annually in the Gila, Agua Fria, and Hassayampa rivers in the vicinity of the Salt River Project. Arizona water is too scarce to permit these tremendous losses to continue if some way can be found to control the phreatophytes. Mr. Williams thinks the SCS is the best agency to study this problem of water conservation and to assist conservation districts in its solution. I promised to take the matter up with our administrative people and see what we could do. Mr. Williams told me that we would count on support of the State of Arizona in such an investigation, although we did not go into the details of what he meant by this statement.

During that week in Phoenix I discussed this subject with Homer M. Wells and W. W. McLaughlin. Mr. McLaughlin agreed that this is one of the most serious problems confronting irrigation and that these growths are increasing in many states besides Arizona. Mr. Wells suggested that we plan to undertake such a study next year in connection with the Rio Grande flood survey. He thought he could get funds from the Bureau of the Budget for this activity if we would send him an outline of the study and an estimate of its cost. The growths at the head of Elephant Butte Reservoir, which now consume an estimated 100,000 acre-feet yearly, are a good spot to try out various methods of eradication and compare their effectiveness and costs.

On November 3 I discussed this same matter at Coolidge with Carl Anderson, Chief Engineer and General Manager of the San Carlos Irrigation and Drainage District. Mr. Anderson is also worried about the losses of irrigation water because of phreatophytes at the head of San Carlos reservoir. His district will be interested in any determination of the most practical way to eradicate and control these growths. I did not think it wise to press for definite assurances of financial or other support but I am satisfied that this district will be very much interested in anything the SCS can accomplish along this line to conserve water.

On the way back from Arizona I discussed this matter with John Gregg, Manager of the Elephant Butte Irrigation District which is dependent on Elephant Butte Reservoir. I asked him if his district would favor our Service undertaking to

*(Sam Turner - U.S. Geological Survey)

VEGETATION

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Robert V. Boyle, Regional Chief of Operations

Harold B. Zimmerman, Chief, Reg. Water Comm. Div.

Control of Phreatophytes

In accordance with a request from C. C. Williams, State Land Commissioner of Arizona, Al Kinsman, and I called on him at Phoenix on the morning of October 28. He wanted to discuss the problem of salt damage and other phreatophytes in Arizona. This was a strange coincidence since I had just written a memo to you on this subject a few days earlier. Besides the estimated 60,000 acre-foot or more consumed at the head of San Carlos reservoir, San Turner estimated that there grows between 200,000 and 300,000 acre-foot annually in the Salt River and Gila River basins in the vicinity of the Salt River Project. Arizona water is too scarce to permit these tremendous losses to continue if some way can be found to control the phreatophytes. Mr. Williams thinks the SCS is the best agency to study this problem of water conservation and to make conservation districts in the solution. I proposed to take the matter up with our administrative people and see what we could do. Mr. Williams said that we would count on support of the State of Arizona in such an investigation, although we did not go into the details of what he meant by this statement.

During that week in Phoenix I discussed this subject with Homer M. Wells and W. W. McLaughlin. Mr. McLaughlin agreed that this is one of the most serious problems confronting irrigation and that these losses are increasing in many states besides Arizona. Mr. Wells suggested that we plan to undertake such a study next year in connection with the Grand Flood Survey. He thought he could get funds from the Bureau of the Budget for this activity if we would send him an outline of the study and an estimate of its cost. The growth at the head of Elephant Butte Reservoir, which now consumes an estimated 100,000 acre-foot yearly, was a good spot to try out various methods of eradication and compare their effectiveness and costs.

On November 3 I discussed this same matter at Goolidge with Earl Anderson, Chief Engineer and General Manager of the San Carlos Irrigation and Drainage District. Mr. Anderson is also worried about the losses of irrigation water because of phreatophytes at the head of San Carlos reservoir. His district will be interested in any determination of the most practical way to eradicate and control these growths. I did not think it wise to make for definite assurances of financial or other support but I am satisfied that this district will be very much interested in anything the SCS can accomplish along this line to conserve water.

On the way back from Arizona I discussed this matter with John Gregg, Manager of the Elephant Butte Irrigation District which is dependent on Elephant Butte Reservoir. I asked him if his district would favor our service undertaking to

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find a solution to this problem or would they attack us as they have done for other parts of our program. Our present view, that the program of our Service should include everything possible in a drainage basin to conserve water, both in quality and in quantity, appealed to Mr. Gregg. He said that if we could present a complete drainage basin program, some phases of which would consume more water while other phases would conserve water, with a net increase in present water supplies, his district could not object. They would have to be sure that these are actual and not paper savings of water, but I think that can be worked out. In response to my statement that I didn't know how we could carry on such an investigation as we have no funds allotted for such purposes, he offered to present our plan and its estimated cost to his directors if we decided to ask them for financial help.

On my return to Albuquerque I found that Dad Love had explored this proposition with the Water Conservation Division in Washington, with the result that phreatophyte control in the Pecos Valley is included in the flood survey report which he is rushing to complete.

If solution of this problem is accepted by the Department and by the Bureau of Budget as a legitimate part of recommendations in the aid of flood control, this is the best way to handle the problem. Since Dad plans to send the Pecos report to Washington soon, in time to be submitted to Congress early in the next regular session, this question should be answered in a few weeks. Our best course is to do nothing further until we have this answer. If phreatophyte control is included in the recommendations submitted to Congress, then we can take steps to bring this point to the attention of water users in the Pecos basin, to counteract the opposition which they have expressed in the past to a program of watershed improvement.

Harold B. Chenderg.

find a solution to this problem or would they attack us as they have done for other parts of our program. Our present view, that the program of our service should include everything possible in a drainage basin to conserve water, both in quality and in quantity, appealed to Mr. Clegg. He said that if we could present a complete drainage basin program, some phases of which would concern some water while other phases would concern water, with a use balance in present water supplies, his divided would not object. They would have to be sure that these are actual and not paper savings of water, but I think that can be worked out. In response to my statement that I didn't know how we could carry on such an investigation as we have no funds allotted for such programs, he offered to present our plan and let the assistant sent to his division if we decided to ask them for financial help.

On my return to Washington I found that Mr. Love had explained this proposition with the Water Conservation Division in Washington, with the result that hydrographic control in the lower valley is included in the flood survey report which he is working to complete.

If solution of this problem is accepted by the Department and by the Bureau of Reclamation as a legitimate part of recommendations in the aid of flood control, this is the best way to handle the problem. Since Mr. Clegg has heard the report to Washington now, it seems to be understood to be done early in the next regular session. This question should be answered in a few weeks. The best course is to be talking further until we have this answer. If hydrographic control is included in the recommendations submitted to Congress, then we can take steps to bring this point to the attention of water users in the lower basin, to counteract the opposition which they have expressed in the past to a program of watershed improvement.

Frank A. Churchill